BEFORE THE

# Federal Communications Commission

WASHINGTON, D.C.



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| In the Matter of | ) | |
| | ) | |
| Inquiry Concerning the Deployment of | ) | |
| Advanced Telecommunications | ) | |
| Capability to All Americans in a | ) | CC Docket No. 98-146 |
| Reasonable and Timely Fashion, and | ) | |
| Possible Steps to Accelerate Such | ) | |
| Deployment Pursuant to Section 706 | ) | |
| of the Telecommunications Act of 1996 | ) | |

**COMMENTS OF TELIGENT, INC.**

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September 14, 1998

**TABLE OF CONTENTS**

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| | | |
|---|---|---|
| In the Matter of | ) | |
| | ) | |
| Inquiry Concerning the Deployment of | ) | |
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**COMMENTS OF TELIGENT, INC.**

Teligent, Inc. ("Teligent") hereby submits its Comments in the above-captioned proceeding.[1]

## I. TELIGENT PROVIDES ADVANCED TELECOMMUNICATIONS CAPABILITIES AND SERVICES AT A SUBSTANTIAL SAVINGS TO AN INITIAL TARGET MARKET OF SMALL AND MEDIUM-SIZED BUSINESSES.

Teligent agrees with the Commission that "[n]o matter how fast the rest of the network is, a slow last mile can deny the promise of advanced telecommunications capability."[2] Teligent also agrees with the Commission that the Section 706 inquiry should focus on emerging technologies -- such as those used by Teligent -- for delivering higher bandwidth services.[3]

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1 Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, CC Docket No. 98-146, *Notice of Inquiry*, FCC 98-187 (rel. Aug. 7, 1998)("NOI").

2 NOI at ¶ 3.

3 Id. at ¶ 12.

Teligent's network technology offers unique and exciting promise for realizing advanced telecommunications capabilities. Its facilities-based broadband alternate "last mile" to the customer completely bypasses the incumbents' local loops and offers an entirely independent means of providing consumers technologically sophisticated high bandwidth capabilities and services. Teligent's method of delivering service to consumers uses spectrum and modern technologies that avoid many of the inefficiencies and unnecessary costs of traditional wireline distribution without sacrificing the benefits (such as bandwidth and reliability).

In addition, because Teligent does not need to dig up streets to run wires and conduits, it avoids imposing inconvenience and expense on cities and neighborhoods in which it offers service. Rather, Teligent uses fixed, digital microwave radio applications to transport communications, and is deploying a cost-effective point-to-multipoint architecture. Conceptually, the airwaves replace the LEC's wires as the transmission medium -- although with much greater speed and capacity. Teligent's digital wireless technology speeds voice, video, and data along at fiber-like speeds.

Small rooftop antennas receive and transmit radio signals from location to location.[4] The signals reach customers in a

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[4] Teligent's rooftop facilities are specific to serving the tenants within that building. Teligent's small antenna (approximately 12 inches in diameter) is mounted on the side of a building or on a small pole or tripod on the rooftop above the height of a person and at sufficient elevation to allow line-of-sight communications with other Teligent

building through telephone inside wire or special connections to the customer's premises. The antennas will ultimately permit variances in network transmission capacity, or scalability, so that the bandwidth used by customers will increase or decrease in accordance with the needs of a particular application. Scalability avoids waste and maximizes efficient spectrum utilization. Moreover, scalability allows Teligent's service to grow as a customer's communications needs grow by allowing customers who do not need the maximum bandwidth to avoid paying for it. At the same time, as a customer's communications needs grow, Teligent will be able to increase that customer's bandwidth to accommodate a customer's addition of more lines or data-intensive applications (such as Internet and videoconferencing). This feature is particularly attractive to small and medium-sized companies.

To provide facilities-based advanced telecommunications service to a tenant in an office building, Teligent must first obtain rooftop access for the placement of its small antenna. The antenna allows Teligent to receive and transmit radio signals which are converted to or from wireline frequencies for customer communication inside the building. Most of the Teligent antennas are very small -- about 12 inches in diameter and smaller than a DBS home receiver. When viewed on a rooftop, they are dwarfed in size by satellite dishes and broadcast television antennas.

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antennas. Because its antennas are building-specific, Teligent does not place towers or other facilities in the

Hence, rooftop access for Teligent's antenna is unobtrusive (particularly in relation to existing rooftop structures) and does not interfere with other uses of the rooftop.

A coaxial cable runs from the Teligent rooftop antenna through a modulator and to the building's or customer's inside wire demarcation point where connection with the customer's telephone system can be accomplished. Where an MDU's existing telecommunications facilities are insufficient to transmit the advanced services that Teligent offers, Teligent installs its own special connection facilities to the customer premises.

The Commission expresses particular interest in the "potential for new entrants to build new last miles to . . . small businesses."[5] Teligent is already doing it. Teligent's microwave facilities provide fiber-like speeds to buildings where actual fiber installations would be uneconomical -- all without digging up any streets. Moreover, Teligent's initial marketing plans are directed towards small and medium-sized businesses. Hence, Teligent brings advanced telecommunications capabilities and services over "new last miles" to consumers who might otherwise not have access to them. Teligent gives small and medium-sized companies across the country the power, service, and savings for their communications needs that the largest businesses have enjoyed for years.

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public rights-of-way, nor does it construct the large towers associated with mobile wireless services.

5 NOI at ¶ 68.

The availability of these services will increase dramatically as Teligent expands its nationwide network. Teligent is ahead of schedule in the construction of its network. Just last month, Teligent announced that it had raised its initial target for launching commercial service by the end of 1998 from 10 to 15 markets. These markets include Austin, Chicago, Dallas-Fort Worth, Denver, Houston, Jacksonville, Los Angeles, Miami, New York City, Orlando, San Antonio, San Francisco-Oakland, San Jose, Tampa, and Washington, D.C. Next year, Teligent expects to complete construction of its network in 20 more markets across the country.

Teligent's increased bandwidth allows it to offer high-speed data applications that would otherwise be too slow over copper wire, such as multiple Internet connections (up to 100 times faster than a dial-up connection with unlimited online time), videoconferencing, and the capability to transfer large files over the Internet in seconds. In addition, Teligent offers several web hosting solutions.

Moreover, Teligent provides local, long distance, and international telephone services, offering traditional analog lines and trunks, as well as digital trunks, T-1s, expanded calling areas, conference calling, voice mail, and custom calling features such as caller ID, call forwarding, priority ringing, and three-way call transfer.

These high quality services are offered at a substantial savings to customers. Teligent's network structure allows it to realize significant savings which are passed directly to the

customer. From the beginning, Teligent can save customers up to 30% off their local telephone, long distance, and Internet service. In addition, for customers who desire a turnkey package (for example, companies without communications managers and staffs), Teligent will provide Internet access, local loop, customer premises equipment (router, CSU/DSU) and installation to a customer's location for one low monthly fee.

## II. REASONABLE AND NONDISCRIMINATORY TELECOMMUNICATIONS CARRIER ACCESS TO TENANTS IN MULTI-TENANT ENVIRONMENTS WILL PROMOTE THE AVAILABILITY OF ADVANCED TELECOMMUNICATIONS CAPABILITIES AND SERVICES.

Of course, a small or medium-sized company's ability to utilize these advanced services and realize these substantial savings depends upon Teligent's ability to access the customer. As noted above, Teligent is making substantial investments in its fixed wireless networks nationwide to offer, inter alia, innovative advanced telecommunications services. However, investment in sophisticated networks is not the ultimate goal of Section 706; rather it is a means of realizing the availability of advanced telecommunications services for all Americans. Telecommunications carrier access to consumers is a necessary predicate to securing advanced telecommunications capability for all Americans.

Because a substantial number of Americans reside or work in multi-tenant environments ("MTEs"), a good portion of telecommunications carrier access must occur within the MTE context. Indeed, the rising emphasis placed on facilities-based telecommunications strategies will increase the demand for MTE access. Notwithstanding the value added by the presence of

additional telecommunications carriers in an MTE, some MTE owners refuse to grant telecommunications carriers access to their tenants or otherwise impose unreasonable rates or terms as conditions of access.[6] Therefore, Teligent urges the Commission to eliminate discriminatory and unreasonable MTE access restrictions so that telecommunications carriers may install and use equipment to provide building tenants with advanced telecommunications services.

By providing for fixed wireless carrier access to rooftops and tenants in multi-tenant environments, the Commission can facilitate the deployment of high-bandwidth advanced fixed wireless systems. Teligent has informed the Commission for over a year that the provision of access to tenants in multi-tenant environments would jump start local competition and secure access to advanced telecommunications services and capabilities for consumers.[7] To ensure that MTE tenants receive the benefits of advanced telecommunications capabilities and services -- such as those offered by Teligent as described above -- Teligent again

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[6] This is by no means the approach adopted by most MTE owners and managers. Indeed, Teligent recently announced a voluntarily negotiated national agreement with U.S. RealTel -- the nation's largest landlord of telecommunications sites -- that covers more than 200 commercial properties across the country. The president of U.S. RealTel, Jordan Glazov, noted that the agreement "adds yet another value-added service for tenants." See "Teligent and U.S. RealTel Sign Major Building Access Agreement," Press Release, Aug. 31, 1998, available at <www.teligent.com>; see also Communications Daily, Sept. 1, 1998 at 5.

[7] See, e.g., Commission Actions Critical to the Promotion of Efficient Local Exchange Competition, CCBPol 97-9, *Comments of Teligent* (filed Aug. 11, 1997)(copy attached).

urges the Commission to secure for telecommunications carriers nondiscriminatory access to MTE inside wiring, riser cables, telephone closets, and rooftops ("MTE access").[8]

MTE access is an important component of any effort to promote the availability of affordable advanced telecommunications services. The speed with which facilities-based entrants provide advanced telecommunications capabilities and services to consumers -- as well the level of ubiquity of those offerings -- is related to the vigor with which the Commission resolves the MTE access issue. If MTE owners and incumbent utilities restrict MTE access by discriminating against new entrants, they will deter such entrants from offering affordable innovative capabilities and services to tenants. Absent Commission action, it is entirely possible that MTE access restrictions will interfere with the advanced telecommunications capabilities of building tenants envisioned and promoted by Section 706. As part of its statutory directive, the Commission should eliminate these restrictions.

The Commission can accomplish this goal in several different ways. First, the Commission can interpret Section 224's definition of "rights-of-way" to encompass utility rights-of-way

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[8] Section 706 is a technology-neutral provision in that it expressly defines advanced telecommunications capability without regard to any particular transmission media or technology. Teligent commends the Commission for its effort to preserve this aspect of the statute by avoiding a wireline bias in its inquiry concerning the implementation of Section 706. To that end, rooftop access will allow fixed wireless carriers to serve building tenants on par with wireline carriers.

within and on top of buildings. Teligent has addressed this matter extensively before the Commission on several occasions.[9] Alternatively, the Commission can require that the demarcation point in all multi-dwelling units be moved to the Minimum Point of Entry and require that all carriers, including incumbents, be granted access to MTEs on nondiscriminatory terms.

Teligent commends the Commission for inquiring into the issue of telecommunications carrier access to the "last hundred feet." However, attempts to resolve these complex and unique issues within the context of this proceeding -- one that considers a multitude of very complex issues -- may decrease the degree to which the Commission can devote the requisite attention that telecommunications carrier access to tenants in multi-tenant environments warrants. For this reason, Teligent suggests addressing the issue of telecommunications carrier access to tenants in multi-tenant environments in a separate proceeding. In any event, Teligent urges the Commission to provide the solutions proposed herein well in advance of the 180-day statutory deadline for the conclusion of this proceeding.

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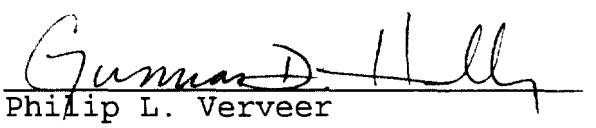
[9] See Implementation of Section 703(e) of the Telecommunications Act of 1996; Amendment of the Commission's Rules and Policies Governing Pole Attachments, CS Docket No. 97-151, *Comments of Teligent* (filed Sept. 26, 1997); *Reply Comments of Teligent* (filed Oct. 21, 1997); *Petition for Reconsideration of Teligent* (filed April 13, 1998); *Reply to Oppositions to the Petition for Reconsideration and Clarification of Teligent* (filed May 22, 1998)(copies attached).

## III. CONCLUSION

For the foregoing reasons, Teligent respectfully requests the Commission to enhance the availability of advanced telecommunications services and capabilities to tenants in MTEs, consistent with the proposals described herein.

Respectfully submitted,

TELIGENT, INC.

By: 
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Dated: September 14, 1998

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| | ) | |
| Commission Actions Critical to the Promotion of Efficient Local Exchange Competition | ) | CCBPol 97-9 |



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## SUMMARY

In order to provide facilities-based alternatives to building tenants, competitive carriers such as Teligent require access to buildings' telephone inside wire, riser cables, and rooftops. Some building owners and ILECs restrict access to these bottleneck facilities or impose unreasonable costs or conditions for access. These restrictions reduce the benefits that would otherwise accrue to building tenants from competition.

The Commission should mandate building access through an interpretation of Section 224 that encompasses private rights-of-way to building rooftops. Moreover, the Commission should also ensure that competitive carriers can obtain access to the risers within a building, as well as the telephone inside wire to the customers' premises.

Although Teligent supports the efforts of those few states that have addressed the building access issue in an effective manner, the Commission should adopt rules for those states that have not eliminated the building bottleneck. The Commission retains authority to mandate building access for competitive carriers and can accomplish this effort to promote local competition by exercising direct or indirect jurisdiction. Finally, the Commission should ensure that the exercise of right-of-way management authority by other governmental units does not impede competitive entry.

## TABLE OF CONTENTS

BEFORE THE

# Federal Communications Commission

WASHINGTON, D.C.

| | | |
|---|---|---|
| In the Matter of | ) | |
| | ) | |
| Commission Actions Critical | ) | CCBPol 97-9 |
| to the Promotion of Efficient | ) | |
| Local Exchange Competition | ) | |

**COMMENTS OF TELIGENT, L.L.C.**

Teligent, L.L.C. ("Teligent")[1] hereby submits its Comments in the above-captioned proceeding.[2]

## I. INTRODUCTION

The Telecommunications Act of 1996[3] exhibits a landmark commitment by Congress and the President to bring all consumers the full benefits of competition by opening local telecommunications markets across the country. At the time of enactment, few thought that this could and would occur immediately. But, over a year and a half later, despite very impressive efforts by the Commission, competitive options in local telephone service exist today only for very few Americans.

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1 Teligent was formerly known as Associated Communications, L.L.C.

2 *Common Carrier Bureau Seeks Recommendations on Commission Actions Critical to the Promotion of Efficient Local Exchange Competition*, CCBPol 97-9, *Public Notice*, DA 97-1519 (rel. July 18, 1997)("Public Notice").

3 Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 ("1996 Act").

Entrenched monopolies in vital and complex industries are not easily challenged. But, the scarcity of local exchange competition today underscores that strong and diverse tools, as well as unyielding focus and persistence, are required to eliminate anticompetitive barriers and the powerful legacy of monopoly, and facilitate rapid and vigorous competitive entry.

Although several major requirements for competition are theoretically available to competitors (i.e., interconnection, unbundled network elements and wholesale rates), some pieces of the network essential to the competitive provision of service remain subject to monopoly control. Negotiations of interconnection agreements are unlike most other negotiations: they involve requests made to a monopolist for cooperation in breaking open its monopoly. These negotiations are slow, not all ILECs are willing to commit adequate resources to the negotiation process given the number of requests pending, only one party really needs what the other has, and choosing arbitration to secure what the law requires-- let alone making the choice repeatedly -- involves substantial delay, burden, and expense.

Nor do these negotiations necessarily address all of the monopolist's advantages or provide a forum for competitors to overcome all of the serious barriers to entry that the Commission is empowered to attack by the Act. As Teligent demonstrates below, the barriers to entry that help maintain monopoly control and favor the incumbent need not be tended assiduously by the incumbent local exchange carrier. In the case of access to building rooftops, telephone inside wire, and riser cables, some

building owners raise very substantially the cost of competitive entry and pocket the benefits of competition which would otherwise reach consumers. At the same time, the monopolist typically enjoys free access to the building and its customers, and all of the access that is necessary for it to provide local and interstate service using its chosen technology. In response to the Commission's request for recommendations, Teligent explains the anticompetitive restrictions on building access, some of the possible remedies available to the Commission, and the sources of Commission authority to open the "last hundred yards" of the local network to competitive entry.

## II. TRUE FACILITIES-BASED PROVIDERS WILL NEED BUILDING ACCESS IN ORDER TO PROVIDE AN ALTERNATIVE TO THE ILEC LOCAL LOOP.

### A. Facilities-Based Providers Will Offer The Most Effective Form Of Competition.

There is no question that, ultimately, the most effective competitive entry strategy will wrest control from the local monopoly and offer a true alternative to the existing local network. Facilities-based competition achieves this result. Entry strategies reliant upon resale or unbundled network elements ("UNEs") offer improvements for consumers over the local monopoly environment. They may even represent important steps for competitors toward making facilities-based competition possible. However, these strategies, to varying degrees, rely on the incumbent LEC network, its costs, and its level of efficiency or inefficiency. Moreover, the Eighth Circuit's recent decision may complicate significantly business strategies that rely on

resale or UNEs, slowing the development of competitive choices.[4] Without true facilities-based entry, competitors and regulators will continue to battle the anticompetitive incentives of an entity with monopoly control over the foundations of the telephone network.

By contrast, an alternative facilities-based network places no reliance on the incumbent LEC's network. Its independence permits it to compete from the fundamental level of network costs and efficiencies to offer enhanced quality, innovative services and features, and lower prices to customers. Facilities-based competition offers economic dynamism and a complete array of benefits to consumers. Notwithstanding the benefits of resale and UNE strategies, telecommunications competition policy requires that facilities-based competition be achieved as quickly as possible in order to bring the greatest benefit to consumers.

As Teligent explains in further detail below, the true facilities-based competitor needs affordable and reasonable access to buildings to secure the opportunity to provide consumers competitive options and to offer those consumers the best discounts. By contrast, a non-facilities-based competitor usually does not require independent access to its customer in a building because it uses the ILEC's facilities. Because building access is not an issue for these carriers, the issue may not have been raised as often or as loudly as the need for

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[4] Iowa Utilities Board v. F.C.C., No. 96-3321 (8th Cir. July 18, 1997).

interconnection, unbundling, or wholesale discounts. But the issue of building access affects all new, facilities-based competitors, whether they deliver service with copper, fiber, or microwaves.

Congress and the Commission have accomplished much in their efforts to bring competition to local telephone markets by affording carriers the right to interconnect, lease UNEs, and purchase services for resale at wholesale discounts. However, the cost and difficulty for competitors to obtain the requisite building access needlessly impairs facilities-based competition to the detriment of consumers, and threatens to diminish considerably the effectiveness of the Commission's other local competition efforts.

### B. Teligent Will Provide Facilities-Based Service To Offer A True Alternative To The ILEC Local Loop.

Teligent will enter markets primarily as a facilities-based provider, developing an independent, alternative network. Teligent's method of delivering service to consumers using spectrum and modern technologies avoids many inefficiencies and unnecessary costs of traditional wireline distribution without sacrificing the benefits. An understanding of Teligent's network design is critical to effective policy making.

Teligent's facilities do not consist of wires running under streets or between poles. Rather, Teligent uses fixed, digital microwave radio applications to transport communications, and will deploy a point-to-multipoint architecture. Conceptually, the airwaves replace the LEC's wires as the transmission medium. Small rooftop antennas receive and transmit radio signals from

location to location. The signals reach customers in the building through telephone inside wire or special connections to the customer's office.

The antennas permit variances in network transmission capacity so that the bandwidth used by customers will increase or decrease in accordance with the needs of a particular application. This technology avoids waste and maximizes efficient spectrum utilization.

The Teligent network is powerful. Teligent will offer high-quality voice, high-speed data, Internet access, and other enhanced services, with an initial focus on small and medium-sized businesses. Teligent may also offer wholesale "last mile" bypass services for IXCs, Internet service providers, and resellers. In short, Teligent will provide a full-service, dynamic alternative telecommunications network. Moreover, construction of Teligent's local network does not involve the time and expense involved in the construction of competitive wireline networks. Therefore, with the requisite building access, Teligent could provide dynamic, low cost competitive local telephone service to businesses in major metropolitan areas within a relatively short time frame.

### C. Building Access Involves Access To Rooftops, Riser Cables, and Telephone Inside Wire At Just And Reasonable Rates And Terms.

To provide facilities-based service to a tenant in an office building, Teligent must first obtain rooftop access for the placement of its small antenna. The antenna allows Teligent to receive and transmit radio signals which are converted to or from

wireline frequencies for customer communication. Most of the Teligent antennas are very small -- smaller than a cafeteria tray or a DBS home receiver. When viewed on a rooftop, they are dwarfed in size by satellite dishes and broadcast television antennas. Hence, rooftop access for Teligent's antenna is unobtrusive (particularly in relation to existing rooftop structures) and would not interfere with other uses for the rooftop.

However, Teligent generally cannot serve a tenant requesting service unless Teligent can place its antenna on the rooftop of that tenant's building. The antenna must be located on the building being served because a coaxial cable runs from the Teligent antenna through a modulator ("IDU" or Indoor Unit, which is smaller than the racks used by most LECs) and to the building's cross connect where connection with the customer's telephone system is accomplished.[5] Hence, rooftop access is important.

Access to riser cables or other conduit within the building is necessary to carry the signal over wires from the rooftop antenna to the IDU and through the building to the customer's connect point, often located in the basement of the building in a telephone closet or equipment room. The riser space within a building frequently has excess capacity or contains unused cables. Use of this excess capacity or removal of the unused

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[5] See Attachment A which contains a diagram of Teligent's facilities within a building's telecommunications infrastructure.

equipment would allow use or sharing of the risers by competitive carriers without the need for costly construction of additional through-ways from the roof to the basement.

Finally, Teligent requires access to the telephone inside wire from the cross-connect to the tenant's premises. Often, a building's equipment room contains a wall board which connects the ILEC's network to the inside wire of the building. Teligent must have the ability to remove the LEC's wires from the that portion of the cross connect pertaining to a customer who chooses Teligent over the LEC (a technically simple and routine procedure),[6] and connect directly into and use the building's wires that connect the telephone network cross-connect with the individual tenants' premises.

### D. Barriers To Building Access Slow Development Of A Competitive Environment.

The need for reasonably priced building access did not present a barrier to carriers before the development of competition. In order for building owners to make their buildings attractive to potential tenants, telephone service needed to be available within their buildings. Hence, they

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[6] The ILEC or building owner should also be required to provide an access to databases depicting accurately to competitive carriers the wiring layout within a building. While connections are simple from a technical standpoint, the difficulty of identifying the proper wiring and routing system can make use of existing facilities within a building a logistical impossibility (leading to an unnecessary waste of riser space, building disruption due to rewiring, and customer expense for the labor costs). Access to accurate databases or maps of telephone inside wiring systems ultimately benefits building owners, competitive carriers, and consumers.